



# ***C2 Enterprise Integration***

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***Vice Commander***

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# Why Enterprise Integration?

## Changing Warfighter Environment

**Autonomous Systems** → **Integrated Aerospace Battlespace Solutions**

**Aging Aircraft** → **Aging Systems**

**Products** → **Military Capabilities**

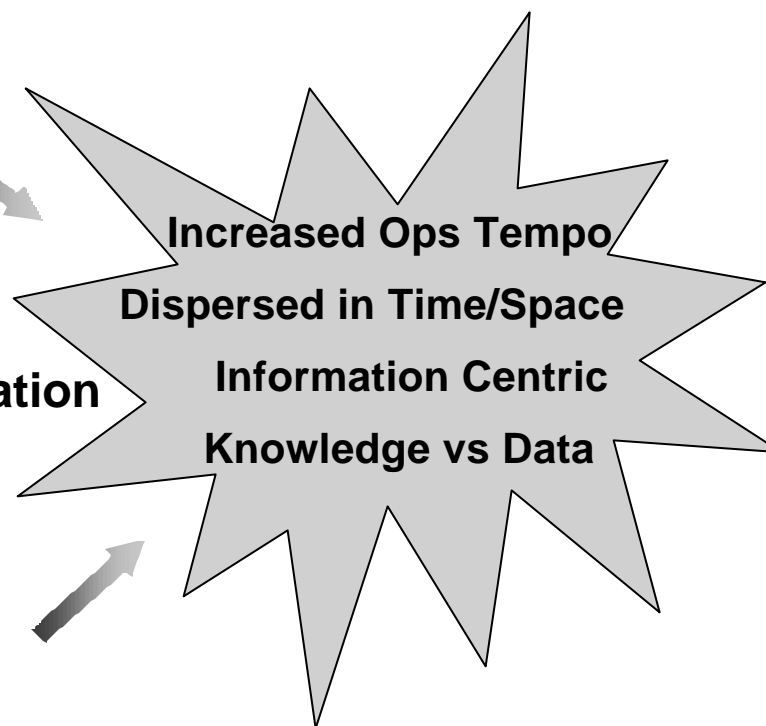
**Point Solutions** → **Effects Based Modernization**

**Platform Centric Mgmt** → **Cross Cutting Visibility/ Leadership**

**System Focus** → **Sys of Sys Architect**

**Product Line Mod Planning** → **Capstone Capability & Core Competencies**

**Single Manager Focus** → **Integrated Senior Leadership Focus**



**Environment Requires Effects Based Capabilities**



# ESC Role in C2 EI

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- ♦ **“To ensure C2ISR integration & interoperability issues are effectively addressed, the Electronic Systems Center (ESC) is assigned the lead role and authority for integration of Air Force C2ISR systems. ESC/CC, as the DAC for C2 Enterprise Integration, will direct actions to ensure the integration of C2ISR systems, and to assure their interoperability with Joint and international systems.”**
- ♦ **“ESC will also lead C2 Enterprise Integration planning and identification of required resources to ensure all USAF C2ISR systems are integrated and interoperable within the USAF and DoD C2ISR framework.”**

*Lawrence J. Delaney, Asst Secretary of the Air Force (Acquisition), 06 Feb 01*



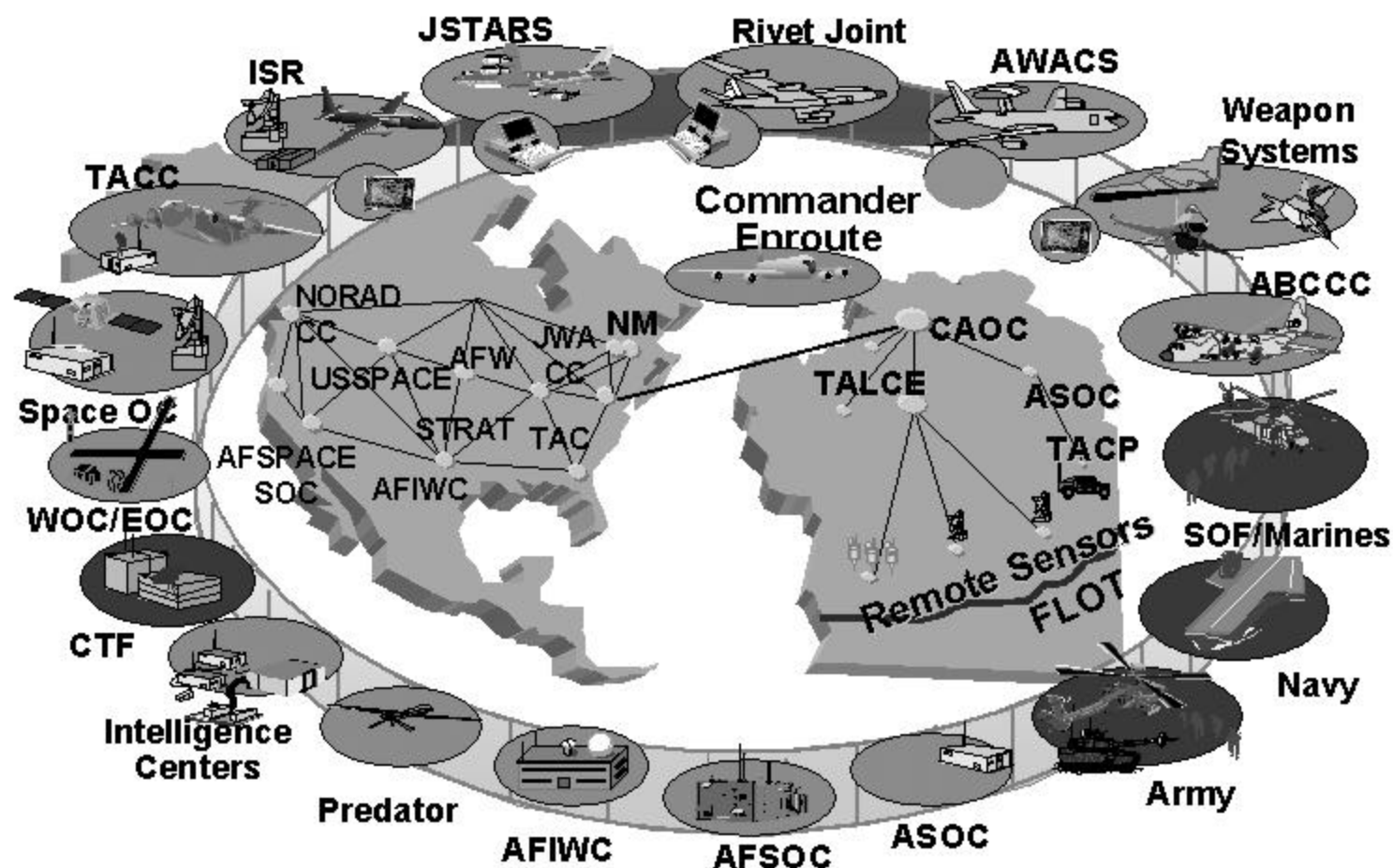
# Strategy for Delivering Integrated C2ISR

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- ♦ **Nodal Approach**
- ♦ **Architecture-driven/Capability-based**
- ♦ **Integration/interoperability-focused**
- ♦ **Experiment-driven & Evolutionary**  
**Acquisition/spiral Development-enabled**
- ♦ **Modeling and Simulation**



# Integrated C2ISR



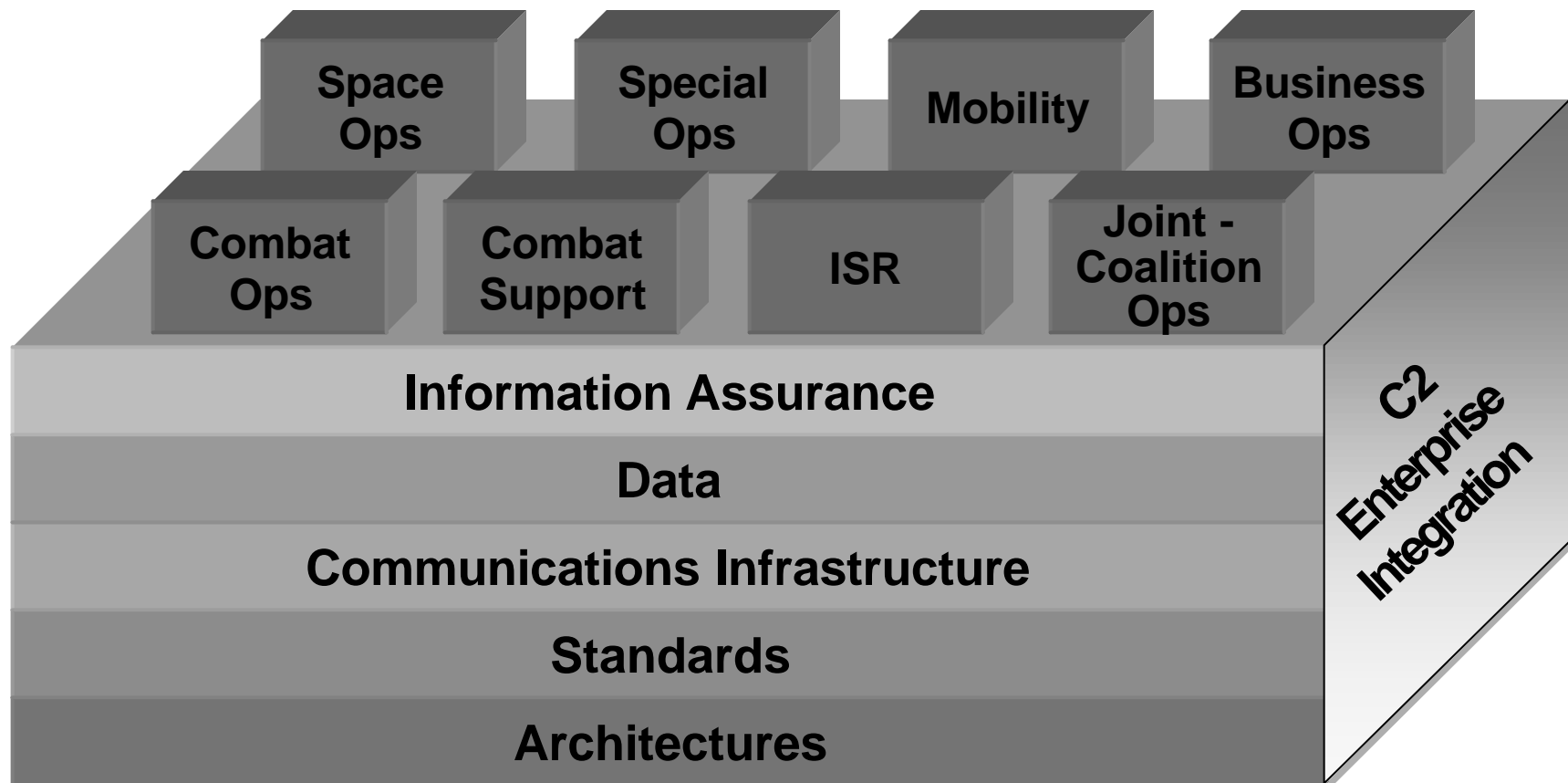
***Efficient & Cost Effective  
Decision Quality Information to the Warfighter***



# Electronic Systems Center

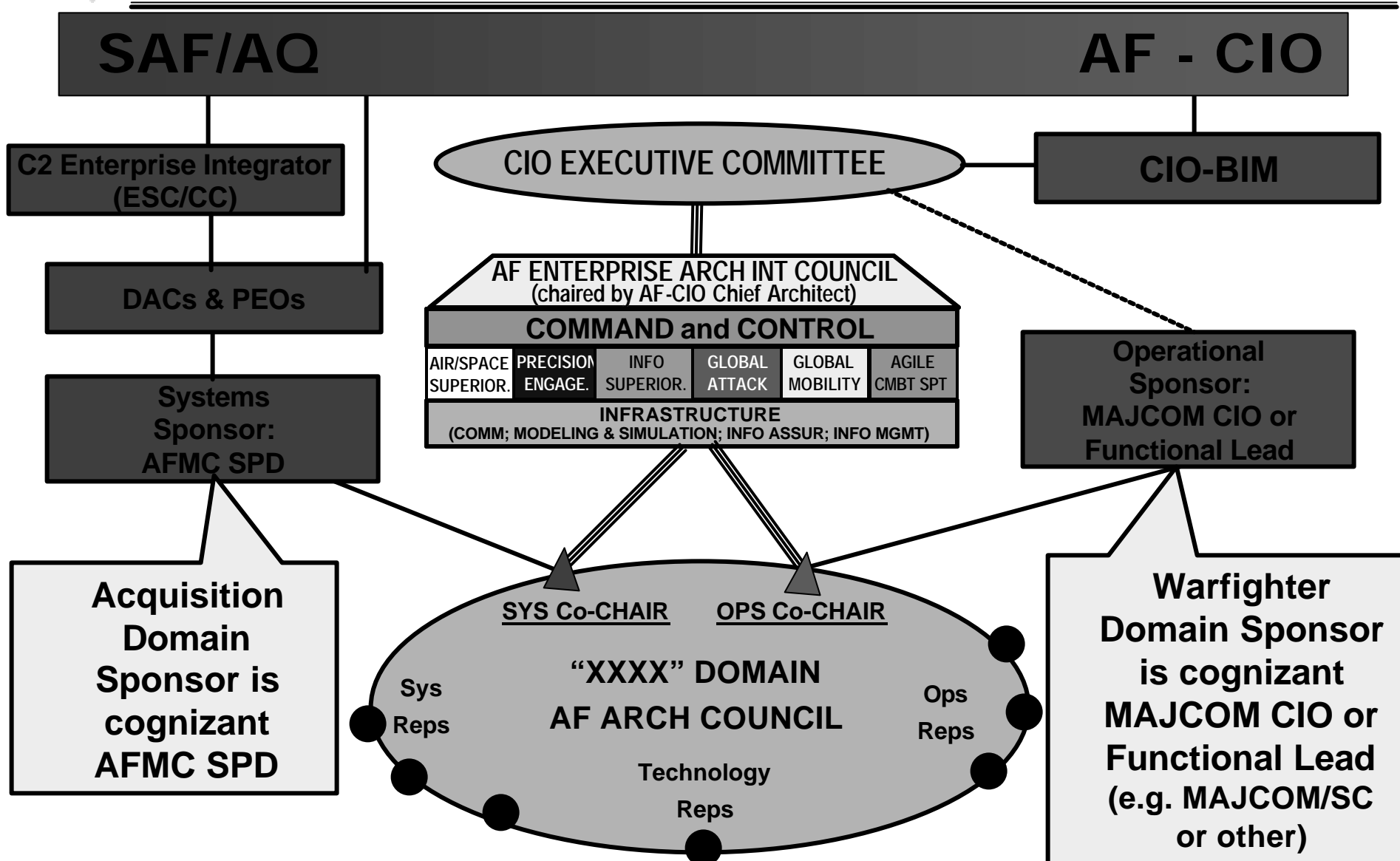
## C2ISR Center of Excellence

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# Architecture Council Management





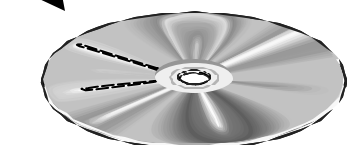
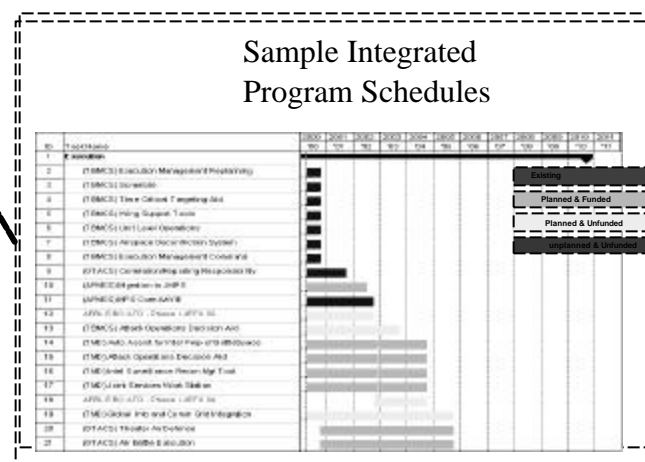
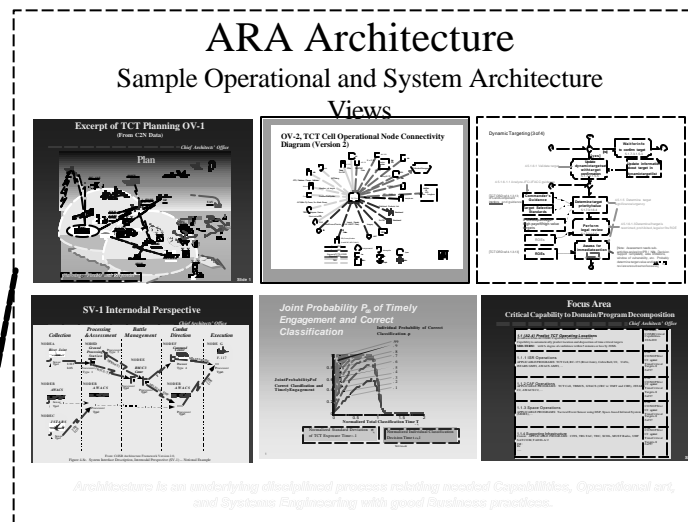


# Analysis of Roadmap Alternatives (ARA)

**Purpose:** Build an integrated, mutually supportive materiel-solution input to the annual C2ISR APOM/POM process

**Products:** Fully integrated Cross-Program Roadmaps for each Focus Area, backed by Architectures.

**Feed Capability Decision Package**



**Focus Area  
Capability Decision  
Package (CDP)  
Inputs for  
POM/APOM**

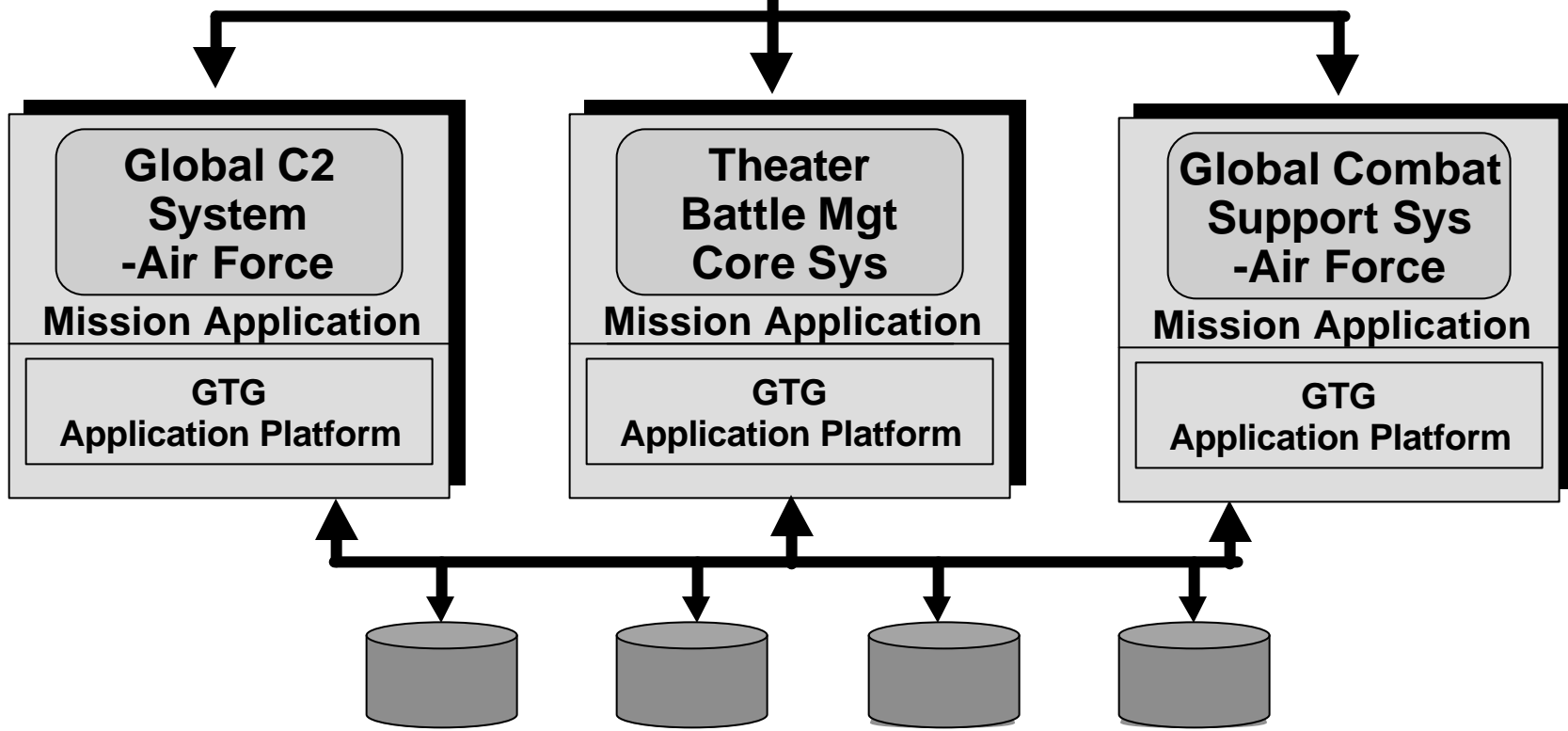


# Example: Web-Based Integration

*Web-enabled, Integrated IT*



Web-Based Clients



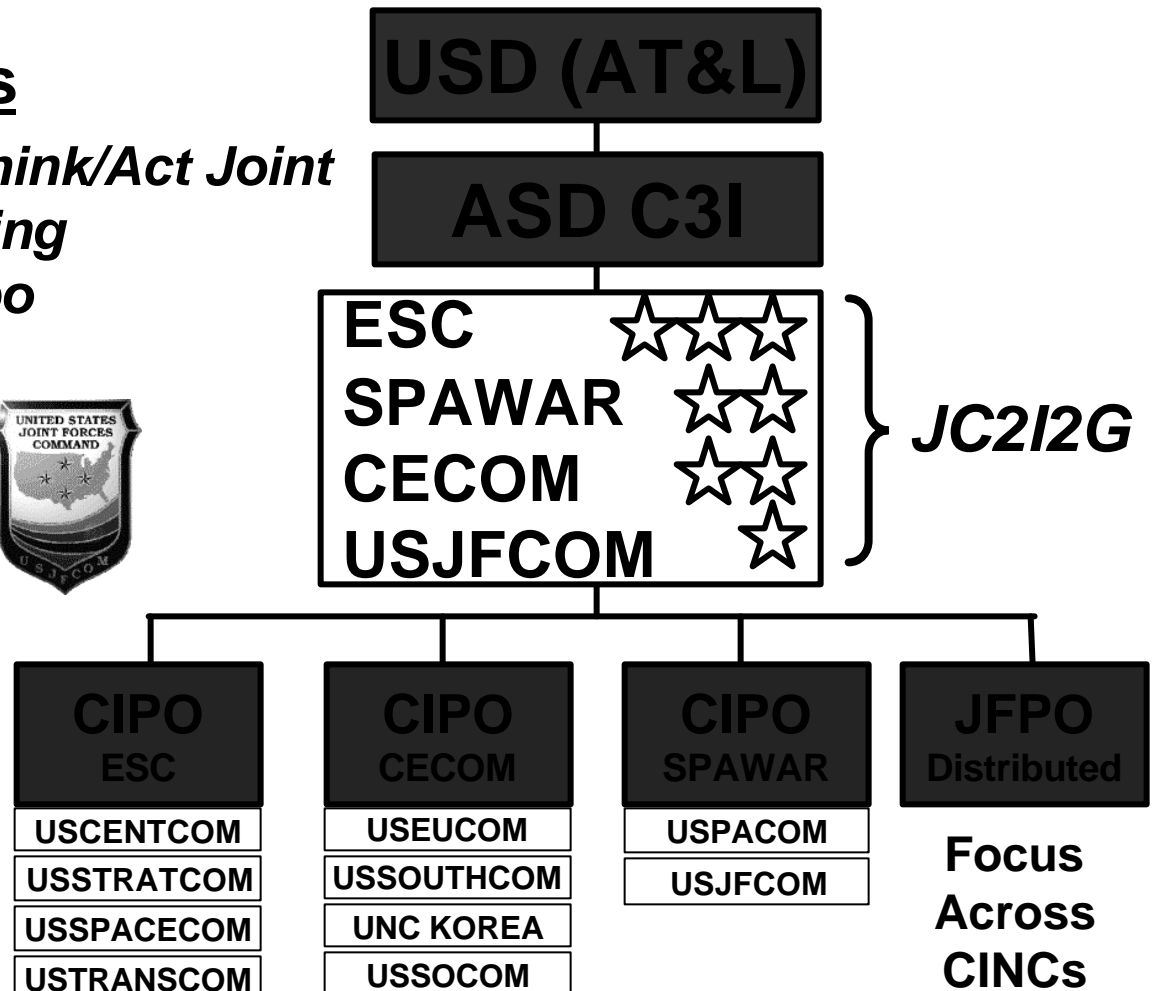
Storage Servers



# CINC Interoperability Program Office(s)

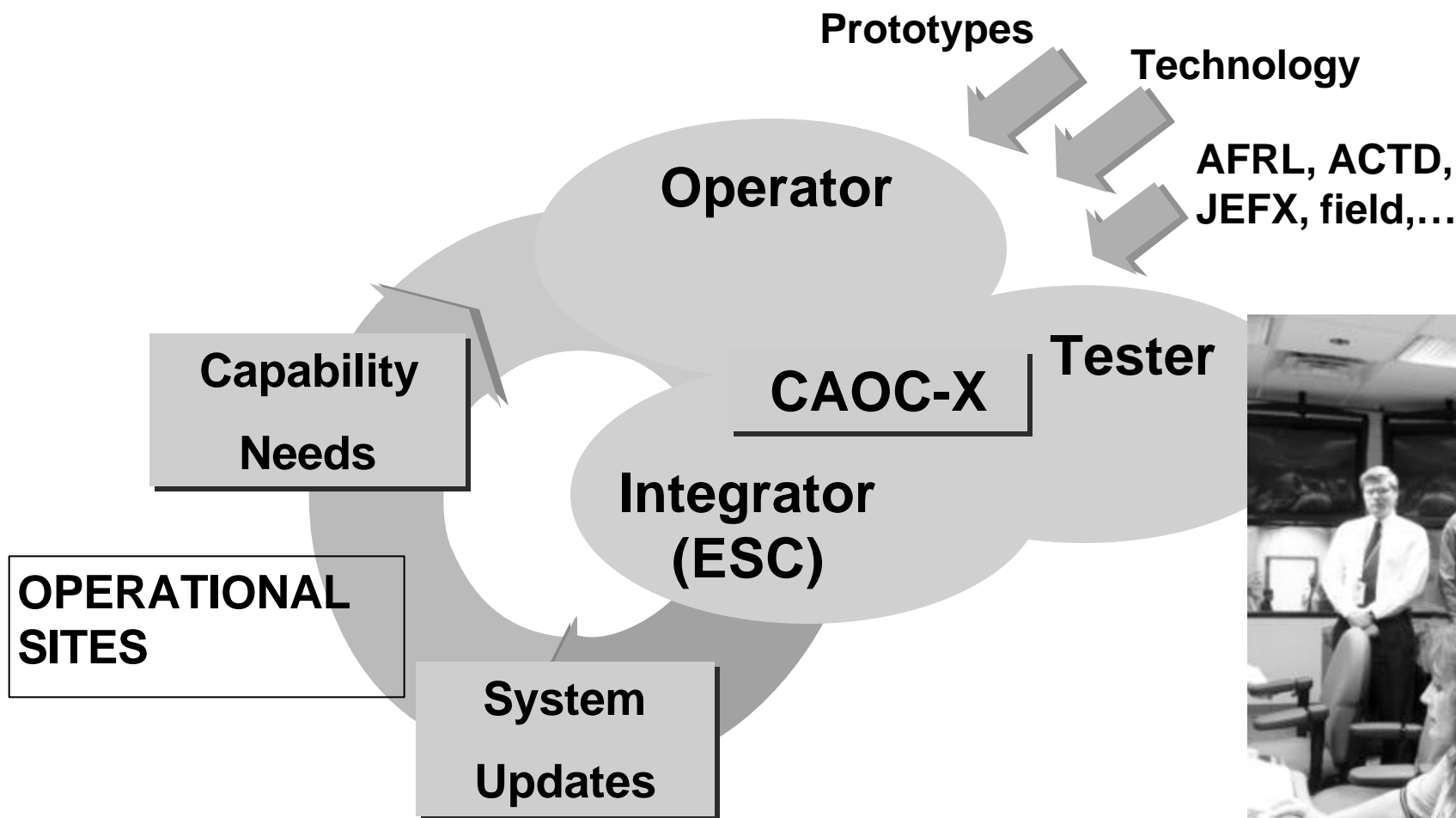
## Key CIPO Challenges

- *Getting SYSCOMS to Think/Act Joint*
- *Joint Acquisition Teaming*
- *Embed CINC Ops Tempo*





# Combined Air Ops Center Experimental

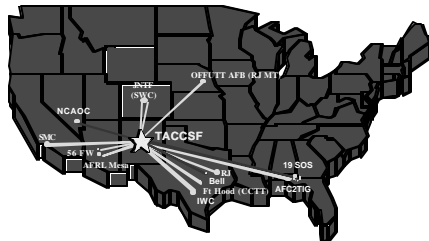




# Analysis Using Synthetic Battlespace

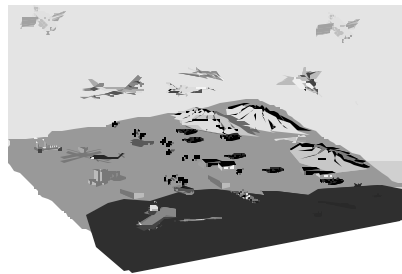
- ♦ **Immerses Acquisition Process Into Warfighter Environment**
  - Quicker Fielding – Avoid Redesign/Mistakes**
  - Cost Avoidance – Total Systems Savings**
  - Improved Product – Better Design/Operator Interfaces**

## WARFIGHTER



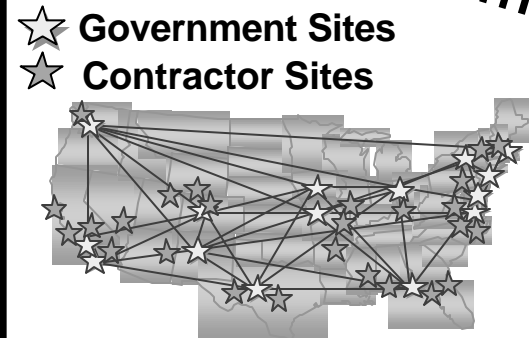
- Training
- Mission Rehearsal
- Ops Definition

## SYNTHETIC BATTLESPACE



- Repeatable
- Variable Resolution/Fidelity
- Verified/Validated/Trusted
- Distributed or Standalone
- “Corporate” Infrastructure

## ACQUISITION



- ☆ Government Sites
- ☆ Contractor Sites

- Technology Analysis
- Design Trades
- Systems Engineering
- Integration and Test
- Operational Testing



# Partnerships for C2 Enterprise Integration

